



and Vibration Impact Assessment guidance document. These guidelines, summarized in **Table 5-18**, are based on land use and time of day and are given in terms of Leq for an 8-hour work shift.

TABLE 5-17 TYPICAL NOISE LEVELS OF CONSTRUCTION EQUIPMENT	
Equipment Type	Typical Sound Level at 50 ft (dBA)
Backhoe	80
Bulldozer	85
Compactor	82
Compressor	81
Concrete Mixer	85
Concrete Pump	82
Crane, Derrick	88
Crane, Mobile	83
Loader	85
Pavement Breaker	88
Paver	89
Pile Driver, Impact	101
Pump	76
Roller	74
Truck	88

Source: Federal Transit Administration, April 1995

TABLE 5-18 FTA CONSTRUCTION NOISE GUIDELINES		
Land Use	Noise Limit, 8-hour Leq (dBA)	
	Daytime	Nighttime
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: Federal Transit Administration, April 1995

The potential for construction noise impact varies by location and land use. Commercial and industrial land uses, which adjoin the majority of the alignment, should not be impacted by construction noise. At residential land use, the potential for temporary noise impact from daytime construction would be limited to locations directly adjacent to the alignment. However, noise impact from nighttime construction would be much more extensive, which emphasizes the importance of avoiding nighttime construction near residential areas.

Construction Noise Mitigation

Construction activities would be carried out in compliance with all applicable local noise regulations. DART Construction Guidelines Specifications Section 01560 Part 1.9 A-G states that construction activities must comply with the noise and vibration maximum limits set out in Tables 01560 1-3. The guidelines also specify appropriate techniques to minimize and mitigate noise and vibration near sensitive land uses. In addition, specific residential property line noise limits would be developed during final design and included in the construction specifications for the project, and noise monitoring would be performed during construction to verify compliance with the limits. This approach allows the contractor flexibility to meet the noise limits in the most efficient and cost-effective manner. Noise control measures that would be applied as needed to meet the noise limits include the following:

- Avoiding nighttime construction in residential neighborhoods;
- Using specially quieted equipment with enclosed engines and/or high performance mufflers;
- Locating stationary construction equipment as far as possible from noise sensitive sites;

